



# भारत का राजपत्र

## The Gazette of India

प्राधिकार से प्रकाशित

PUBLISHED BY AUTHORITY

सं 43]  
No. 43]नई दिल्ली, शनिवार, अक्टूबर 27, 1990 (कार्तिक 5, 1912)  
NEW DELHI, SATURDAY, OCTOBER 27, 1990 (KARTIKA 5, 1912)

इस भाग में भिन्न पृष्ठ संलग्न दी जाती हैं जिससे कि यह अलग संकलन के रूप में रखा जा सके  
[Separate paging is given to this Part in order that it may be filed as a separate compilation]

भाग III—खण्ड 2  
[PART III—SECTION 2]

पेटेन्ट कार्यालय द्वारा जारी की गई पेटेन्टों और डिजाइनों से सम्बन्धित अधिसूचनाएं और नोटिस  
[Notifications and Notices Issued by the Patent Office relating to Patents and Designs]

THE PATENT OFFICE  
PATENTS AND DESIGNS

Calcutta, the 27th October 1990

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THE PATENT OFFICE

The Patent Office has its Head Office at Calcutta and Branch Offices at Bombay, Delhi and Madras having territorial jurisdiction on a zonal basis as shown below :—

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Lower Parel (West),  
Bombay-400 013.

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Telegraphic address "PATOFFICE".

Patent Office Branch,  
Unit No. 401 to 405, III Floor,  
Municipal Market Building,  
Saraswati Marg, Karol Bagh,  
New Delhi-110 005.

The States of Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan and Uttar Pradesh and the Union Territories of Chandigarh and Delhi.

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Telegraphic address "PATENTOFIS".

Patent Office (Head Office),  
"NIZAM PALACE", 2nd M.S.O. Bldg.,  
5th, 6th and 7th Floor,  
234/4, Acharya Jagdish Bose Road,  
Calcutta-700 020.

Rest of India.

Telegraphic address "PATENTS".

All applications, notices, statements or other documents or any fees required by the Patents Act, 1970 or the Patents Rules, 1972 will be received only at the appropriate Offices of the Patent Office.

**Fees** :—The fees may either be paid in cash or may be sent by Money Order or Postal Order, payable to the Controller at the appropriate Office or by Bank Draft or Cheque, payable to the Controller drawn on a scheduled bank at the place where the appropriate office is situated.

पेटेंट कार्यालय

एकस्व तथा अभिकल्प

कलकत्ता, दिनांक 27 अक्टूबर 1990

पेटेंट कार्यालयों के पते एवं क्षेत्राधिकार

पेटेंट कार्यालय का प्रधान कार्यालय कलकत्ता में स्थित है तथा अम्बई, दिल्ली एवं मद्रास में इसके शाखा कार्यालय हैं; जिनके प्रादेशिक क्षेत्राधिकार जोन के आधार पर निम्न रूप में प्रदर्शित हैं :—

पेटेंट कार्यालय शाखा, टोडी इस्टेट,  
तीसरा तल, लोअर परेल (पश्चिम),  
अम्बई-400 013

गुजरात, महाराष्ट्र तथा मध्य प्रदेश राज्य क्षेत्र एवं संघ शासित क्षेत्र गोआ,  
मध्य तथा दिव एवं दादरा और नगर हवेली।

तार पता—“पेटेंटफिस”

पेटेंट कार्यालय शाखा,  
इकाई सं० 401 से 405, तीसरा तल,  
नगरपालिका बाजार मध्य,  
सरस्वती मार्ग, करोल बाग,  
नई दिल्ली-110 005

हरियाणा, हिमाचल प्रदेश, जम्मू तथा कश्मीर, पंजाब, राजस्थान तथा  
उत्तर प्रदेश राज्य क्षेत्रों एवं संघ शासित क्षेत्र चंडीगढ़ तथा दिल्ली।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय शाखा,

61, वालाजाह रोड,  
मद्रास-6(0) 002

त्रांग प्रदेश, कर्नाटक, केरल, तमिलनाडु राज्य क्षेत्र एवं संघ शासित क्षेत्र पाण्डिचेरी, लक्ष्मीप, मिनिकाय तथा एमिनिदिपि द्वीप।

तार पता—“पेटेंटोफिस”

पेटेंट कार्यालय (प्रधान कार्यालय),  
निजाम पैलाम, द्वितीय अद्वृतलीय कार्यालय  
मध्य 5, 6 तथा 7वां तल,  
234/4, नासार्य जगदीश बोम रोड,  
कलकत्ता-700 020

मारत का अवशेष क्षेत्र

तार पता—“पेटेंटस”

पेटेंट अधिनयम, 1970 या पेटेंट नियम, 1972 में अपेक्षित समय आवेदन-पत्र, सूचनाएँ, विवरण या अन्य प्रलोक्य पेटेंट कार्यालय के केवल उपयुक्त कार्यालय में ही प्राप्त किए जाएंगे।

शुल्क :—शुल्कों की अवायी या तो नकद की जाएगी अथवा उपयुक्त कार्यालय में नियंत्रक को भुगतान योग्य घनादेश अथवा छाक आदेश या जहां उपयुक्त कार्यालय स्थित है, उस स्थान के अनुसूचित बैंक से नियंत्रक को भुगतान योग्य बैंक द्वापर्य अथवा बैंक द्वारा की जा सकती है।

#### CORRIGENDUM

In the Gazette of India June 9, 1990. (Jyaiṣṭha 19, 1912) page 622 after line 18 in the first column, the following are to be inserted :

23rd March, 1990

1967/Bom/90 Hindustan Lever Ltd. Diesters and their use in waxes.

1968/Bom/90 Hindustan Lever Ltd. Multi-cavity dispensing container.

1969/Bom/90 Pennwalt India Ltd. A reclamation process and more particularly a process for reclamation of spent lubricating oils from various sources.

1970/Bom/90 Pennwalt India Ltd. A novel reclamation process of spent lubricating oils.

1971/Bom/90 Harish Textiles Engineers Ltd. An improved fabric sueding machine.

1972/Bom/90 Technova Platemaking systems Limited. A liquid dispenser.

26th March, 1990

1973/Bom/90 Mohanlal Purushottamdas Tank. Process of enhancing tensile strength of metals and metals made by such process.

1974/Bom/90 Mohanlal Purushottamdas Tank. A new method of reinforcing cement concrete.

28th March, 1990

1975/Bom/90 Dr. Vinod Baburao Shidham & Mrs. Anjani Vinod Shidham. Long Life Media-prepoured and it's container

1976/Bom/90 Sunil Bhupendra Patel & Dr. Saroj Kumar Mohanty. Tipper Barrow for street garbage disposal.

29th March, 1990

1977/Bom/90 Arun Hari Kulkarni. Improvements in or relating to solar water heater.

1978/Bom/90 Raj Rohitbhai Parikh. An improvement in or relating to the yarn tensioner.”

Alteration of entries in the Register of Patent Agents under Rule 103 of the Patents Rules, 1972.

IN PURSUANCE OF APPLICATIONS ON FORM 52, THE ADDRESSES OF THE PRINCIPAL PLACE OF BUSINESS IN RESPECT OF THE FOLLOWING PERSONS HAVE BEEN ALTERED.

1. Ms. Seeta Badrinath  
17, Subramaniam Colony,  
Madras-600 041.
2. Shri Amrit R. Kini,  
A-2 New Devnup Society,  
Daulat Nagar, Relief Road,  
Santacruz West, Bombay-400 054
3. Shri A.J. Vinobaji,  
C/O. M/s. DePenning & DePenning,  
31, Wallajah Road,  
Madras-600 002.

APPLICATIONS FOR PATENTS FILED AT THE PATENT OFFICE BRANCH, 61, WALLAJAH ROAD, MADRAS-600 002.

10th September, 1990

714/Mas/90 Union Carbide Chemicals and Plastics Company Inc., Ethylene/Propylene/Ethylidene Norbornene Rubbers.

715/Mas/90 Union Carbide Chemicals and Plastics Company Inc., Ethylene/Propylene/Ethylidene Norbornene Rubbers.

716/Mas/90 Rhone-Poulenc Sante. System for continuous liberation of vitamin A and other active principles into drinking water.

11th September, 1990

717/Mas/90 Wacker-Chemie GmbH. Process for the preparation of halogenoalkanes.

718/Mas/90 Maschinenfabrik Rieter AG. Device for feeding fibres slivers to a textile processing machine.

719/Mas/90 The Charles Stark Draper Laboratory, Inc., Apparatus for detecting skipped stitches.

12th September, 1990

720/Mas/90 BASF Corporation. Methods of preserving, storing, and using hydroxylamine production catalyst.

721/Mas/90 Zellweger Uster AG. Machine for the automatic drawing in of warp threads.

13th September, 1990

722/Mas/90 The Dow Chemical Company. Metal complex compounds, process for preparation and method of use.

723/Mas/90 P.L.G. Research Limited. Geogrids. (September 14, 1989; Great Britain).

724/Mas/90 Maschinenfabrik Rieter AG. Manipulation of food packages or feed strands in a spinning machine.

14th September, 1990

725/Mas/90 India Pistons Limited. A thermally insulated piston for an internal combustion engine..

726/Mas/90 Astra Research Centre India. A novel expression vector.

727/Mas/90 Astra Research Centre India. A novel method for the detection of hydrobacterium tuberculosis

728/Mas/90 Plasma Energy Corporation. Furnace-plasma arc torch-supervisory control system for recovery of free aluminum from aluminum dross.

729/Mas/90 The Board of Regents of the University of Washington Characterizing matter of biological origin using near infrared spectroscopy.

730/Mas/90 Minnesota Mining and Manufacturing Company and Board of Regents of the University of Washington Characterizing biological matter in a dynamic condition using near infrared spectroscopy.

#### PRINTED SPECIFICATION PUBLISHED

A limited number of Printed Copies of the undernoted Specifications are available for sale from the PATENT OFFICE, CALCUTTA and its Branches at Bombay, Madras and Delhi at 2/- (Rupees two Only) per copy.

(1)

157661 157662 157663 157664 157665 157666 157667 157668 157669  
157670 157671 157672 157673 157674 157675 157676 157677 157678  
157679 157680 157681 157682 157683 157684 157685 157686 157687  
157688 157689 157690 157691 157692 157693 157694 157695 157696  
157697 157698 157699

(2)

157700 157701 157702 157703 157704 157705 157706 157707 157708  
157709 157710 157711 157712 157713 157714 157715 157716 157717  
157718 157719 157720 157721 157722 157723 157724 157725 157726  
157727 157728 157729 157730 157731 157732

(3)

157733 157734 157735 157736 157737 157738 157739 157740 157741  
157742 157743 157744 157745 157746 157747 157748 157749.

#### PATENT SEALED

165536 165589 165627 165701 165710 165890 165911 165918 165919  
165923 165948 165975 165980.

CAL—7.  
DEL—5.  
MAS—NIL.  
BOM—1.

REGISTRATION OF ASSIGNMENTS, LICENCES, ETC.  
(PATENTS)

Assignments, Licences or other transactions affecting the interest of the Original Patentees have been registered in the following cases.

The Number of each case is followed by the name of the parties claiming interests—

149429—Kadarundalige Sitaramdas Guru raja Doss.

## RENEWAL FEES PAID

144695 147551 148223 149426 150315 150388 150543 150650 150668  
150945 151347 151951 152167 152700 152963 153164 153328 153533  
153724 153749 153940 153975 154128 154903 155084 155608 156348  
156822 156960 159438 159953 160019 160115 160228 161319 161608  
161774 161943 161985 162306 162424 162757 162818 162909 163459  
163519 163562 163739 163765 163960 163969 165058 165290 165652  
165709 165739.

## COMPLETE SPECIFICATION ACCEPTED

Notice is hereby given that any person interested in opposing the grant of patents on any of the Applications concerned, may, at any time within four months of the date of this issue or within such further period not exceeding one month applied for on Form 14 prescribed under the Patents Rules, 1972 before the expiry of the said period of four months, give notice to the Controller of Patents on the prescribed Form 15, of such opposition. The written statement of opposition should be filed alongwith the said notice or within one month of its date as prescribed in Rule 36 of the Patents Rules, 1972.

The classifications given below in respect of each specification are according to Indian Classification and International Classification.

A limited number of printed copies of the specifications listed below will be available for sale from the Government of India Book Depot, 8, Kiran Sankar Roy Road, Calcutta, in due course. The price of each specification is Rs. 2/- (postage extra if sent out of India). Requisition for the supply of the printed specifications should be accompanied by the number of the specifications as shown in the following list.

Typed or photo copies of the specifications together with photo copies of the drawings, if any, can be supplied by the Patent Office, Calcutta on payment of the prescribed copying charges which may be ascertained on application to that office. Photo copying charges may be calculated by adding the number of pages in the specification and drawing sheets mentioned below against each accepted specification and multiplying the same by four to get the charges as the copying charges per page are Rs. 4/-.

## स्वीकृत सम्पूर्ण विनिर्देश

एतदादारा यह सूचना दी जाती है कि सम्बद्ध आवेदनों में से किसी पर पेटेंट अनुदान का विरोध करने के इच्छुक कोई व्यक्ति, इसके निर्गम की तिथि से 4 महीने या अधिक ऐसी अवधि जो उक्त 4 महीने की अवधि की समाप्ति के पूर्व पेटेंट नियम, 1972 के तहत विहित प्रपत्र-14 पर आवेदित एक महीने की अवधि से अधिक न हो, के भीतर कभी भी नियत्रक, एकत्व को ऐसे विरोध की सूचना विहित प्रपत्र-15 पर दे सकते हैं। विरोध सम्बन्धी तिथिक्षण वक्तव्य, उक्त सूचना के साथ अदावा पेटेंट नियम, 1972 के नियम 36 में यथाविहित इसकी तिथि के एक महीने के भीतर ही फारूक किए जाने चाहिए।

“प्रत्येक विनिर्देश के संदर्भ में नीचे दिए वार्गिकरण, मारतीय वार्गिकरण तथा अन्तरराष्ट्रीय वार्गिकरण के अनुरूप हैं।”

नीचे सूचीगत विनिर्देशों की सीमित संख्यक में मुद्रित प्रतियाँ, मारत सरकार बुक हिपो, 8, किरण शंकर राय रोड, कलकत्ता में विक्रय हेतु यथासमय उपलब्ध होंगी। प्रत्येक विनिर्देश का मुल्य 2/- रु० है (यदि मारत के बाहर में जो आई तो अतिरिक्त ढाक दर्ता)। मुद्रि विनिर्देश की आपूर्ति हेतु मांग पत्र के साथ निम्नलिखित सूची में यथाप्रदाशित विनिर्देशों की संख्या संलग्न रहनी चाहिए।

रूपांकन (चित्र आरेखों) की फोटो प्रतियाँ, यदि कोई हों, के साथ विनिर्देशों की टकिल अदावा फोटो प्रतियों की आपूर्ति पेटेंट कार्यालय, कलकत्ता द्वारा विहित लिप्यान्तरण प्रभार उक्त कार्यालय से पत्र-व्यवहार द्वारा सुनिश्चित करने के उपरात उसकी अदायगी पर की जा सकती है। विनिर्देश की पृष्ठ संख्या के साथ प्रत्येक स्वीकृत विनिर्देश के सामने नीचे वर्णित चित्र आरेख कागजों को जोड़कर उसे 4 से गुण करके (क्योंकि प्रत्येक पृष्ठ का लिप्यान्तरण प्रभार 4/- रु० है) फोटो लिप्यान्तरण प्रभार का परिकलन किया जा सकता है।

Ind. Cl. : 136 K (XIII).

167421

Int. Cl. : B 29C—55/18.

## IMPROVED PROCESS AND APPARATUS FOR STRETCHING OF A CONTINUOUS POLYMERIC SHEET MATERIAL.

Applicant & Inventor : OLE-BENDT RASMUSSEN, A DANISH CITIZEN, DIRECTOR, SILTAP CHEMICAL LIMITED, 612 RAHEJA CHAMBERS, NARIMAN POINT, BOMBAY-400 021, MAHARASHTRA, INDIA (ALSO AT 23, FORCHWALD-STRASSE, CH-6318 WALCHWIL, SWITZERLAND).

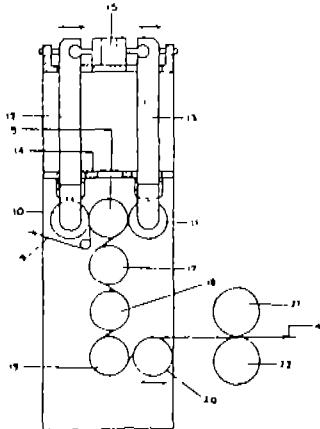
Application No. 386/Bom/1987 filed on 31-12-1987.

(U.K. Priority date 16-1-87 and 16-4-1987).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay-13.

## 32 Claims

Improved process for stretching of a continuous polymeric sheet material (4) consisting of transverse tentering of said sheet material by passage between intermeshing grooved rollers (9 and 10, 11) in which each groove extends substantially helically or circularly around each roller and consists of a base (6), a peak (7) at each side and outwardly inclined side walls (5) that extend between the base and peaks and the sheet material is thereby stretched transversely into pleats that extend substantially in the machine directions, characterised in that the total roller length is at least 50 cm, the separation between adjacent peaks is less than about 3 mm, the side walls of intermeshing grooves have portions which are substantially parallel to each other, and the sheet material is compressed between substantially every pair of the said substantially parallel side wall portions by forcing the rollers together with a pressure that is substantially uniform along the length of the rollers and that is at least 17 Kg/cm axial length of the roller, thereby effecting the transverse stretching by combined tentering and compression and characterised in that the said sheet material is further stretched longitudinally and/or transversely to eliminate the pleats substantially.



- e. An AND gate 5 with one input formed by the said voltage pulses from the said SSI pulse generator 5, the other input being supplied by the said logic signal from the said logic and timing circuit 4, being operative to deliver to the integrator 6 start pulses separated precisely by an odd multiple of the half period of actual power line voltage waveform so that the phase difference between the starting instants of the said integration periods of the said analog input is equal to an odd multiple of  $\pi$  radians for successive cycles of integration,
- f. A Counter 9 which counts the precise and stable clock pulses from the clock oscillator 8 for the said gating period set by the said logic and Timing Circuit 4 and accumulates the count for a number of integration cycles decided by the said logic and Timing Circuit 4,
- g. A readout logic block 10 with means to extract the average value of the digital output from the said accumulated count of the said counter 9 by averaging the results of a number of integration cycles which is dependent on the resolution, accuracy and speed specifications; the said means being adapted to yield desired type of average value of the digital output as shown in Fig. 1.

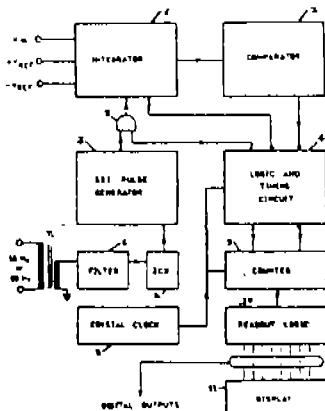


Fig. 1

Compl. Specn. 16 Pages.

Drgs. 2 Sheets.

Ind. Cl. 67 C--LI (2), 206 E--LXII.  
Int. Cl. H 03 M--1/12, G 06 F--11/00.

167424

#### MULTICHANNEL ELECTRONIC ANALOG TO DIGITAL CONVERTER

Applicant & Inventor: NANDAKUMAR RAMACHANDRA JOSHI, 66, SAHAWAS SOCIETY, KARVENAGAR, PUNE-411 052, MAHARASHTRA, INDIA.

Application No. 36/Bom/1988 filed on 19-2-1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay.

#### 2 Claims

A multichannel electronic Analog to Digital Converter comprising:

- (a) A programmable frequency multiplier 2 which multiplies the *actual* power line frequency to provide a variable sampling frequency to sample each of the analog input voltages  $V_1$  to  $V_n$  from  $n$  channels,

- (b) A programmer and Sequencer Circuit 3 which sets the multiplication factor of the said frequency multiplier 2 to be an integer of a value dependent on the harmonic content of the periodic noise waveform of power line frequency,
- (c) An input filter 4 provided with each of the said channel analog input voltages  $V_1$  to  $V_n$  having its adjustable cutoff frequency set equal to the said sampling frequency,
- (d) An input multiplexer circuit 5 which feeds samples of the said analog input voltages  $V_1$  to  $V_n$  one by one to the sample and Hold circuit 6 in a time sequence set by the said programmer and sequencer circuit 3 at the said sampling frequency,
- (e) A sample and Hold circuit 6 controlled by the said Programmer and Sequencer circuit 3 to store the sample from each of the said analog input voltage  $V_1$  to  $V_n$ ,
- (f) An Analog to Digital Converter 7 which converts the stored sample of analog input voltage level into digital form,
- (g) An accumulator 9 corresponding to each of the said analog input voltage  $V_1$  to  $V_n$  from the  $n$  channels to accumulate the consecutive digital outputs from the said Analog to Digital Converter 7 for each of the said  $n$  channels for a time duration set by the said Programmer and Sequencer circuit 3,
- (h) An output multiplexer 8 which is controlled by the said Programmer and Sequencer Circuit 3 to route the digital output of the said Analog to Digital Converter 7 to the said accumulator 9 corresponding to each of the said analog input voltages  $V_1$  to  $V_n$ ,
- (i) A readout logic block 10 which includes means to extract the average value of the digital output from the accumulated count of each of the said accumulators 9 over an averaging time equal to the period of *actual* power line voltage waveform (or an integral multiple of the said period) the said means being adapted to yield a simple linear average value at the repetition rate equal to the power line frequency or the moving average value at the repetition rate of the sampling frequency or any other type of average value of the digital output as shown in Fig. 1.

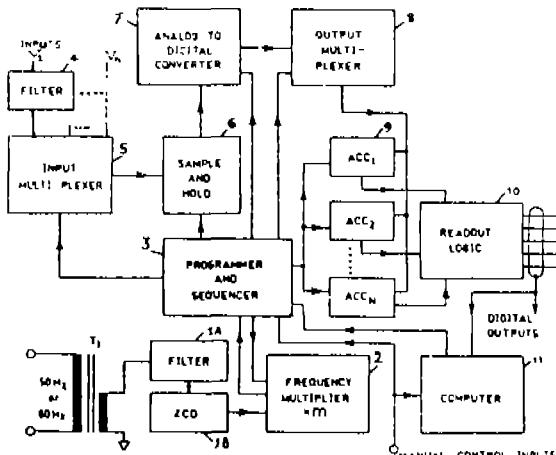


Fig. 1

Compl. Specn. 12 Pages.

Drg. 2 Sheets.

Ind. Cl. : 32 F 1, 32 F 2 (b) IX (1), 55 E 4 XIX (1) 167425  
Int. Cl. : C 07 D—417/00, 417/02.

**A PROCESS FOR THE PREPARATION OF NOVEL CHEMO-THERAPEUTIC THIENO (4, 5-g) QUINOXALINES AND PHARMACEUTICALLY ACCEPTABLE SALTS THEREOF.**

**Applicant :** HOECHST INDIA LIMITED, AN INDIAN COMPANY HAVING ITS REGISTERED OFFICE AT HOECHST HOUSE, NARIMAN POINT, 193 BACKBAY RECLAMATION, BOMBAY-400 021, MAHARASHTRA, INDIA.

**Inventors :** (1) DR. BINDUMADHAVAN VENUGOPALAN, (2) DR. CHINTAMANI PRABHAKAR BAPAT, (3) DR. DEEPAK KUMAR CHATTERJEE, (4) DR. NOEL JOHN DE SOUZA, (5) DR. RICHARD HELMUT RUPP.

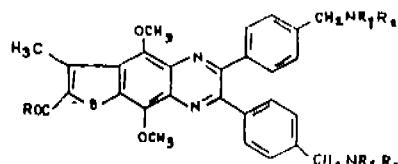
Application No. 46/Bom/1988 filed on Feb. 26, 1988.

Complete after provisional left on Feb. 22, 1989.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay-13.

**2 Claims**

**A process for the preparation of novel chemotherapeutic thieno (4, 5-g) quinoxalines of the formula I**



Formula I

shown in the drawings accompanying the provisional specification, wherein R stands for hydroxy, alkoxy or a group of the formula shown in Fig. 1

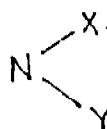
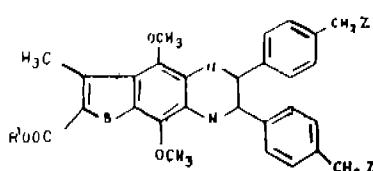


Fig. 1

of the drawings accompanying the provisional specification, wherein X and Y when they are the same stand for hydrogen, alkyl, hydroxyl, alkyl, alkene or dialkylaminoalkyl, when X stands for hydrogen Y stands for alkyl, aryl, aralkyl, substituted alkyl, cycloalkyl, acyl or heterocycle, X and Y together with the nitrogen to which they are attached form a heterocycle containing one or more heteroatom(s) and is optionally substituted by alkyl, aralkyl, carboxyalkyl or aryl which is optionally substituted with substituents such as halogen, hydroxy, nitro, trifluoromethyl, alkoxy, alkyl, or substituted alkyl and R<sub>1</sub> and R<sub>2</sub> have the same meaning as given for X and Y and pharmaceutically acceptable salts thereof, which process comprises reacting 6, 7-di (4-substituted phenyl)-4, 9-dimethoxy-3-methylthiopheno (4, 5-g) quinoxalin-2-carboxylate of the formula II



Formula II

shown in the drawings accompanying the provisional specification, wherein R' stands for C<sub>1</sub>—C<sub>6</sub> alkyl and Z stands for halogen such as

bromo with an amine of the formula HNR<sub>1</sub>R<sub>2</sub>, wherein R<sub>1</sub> and R<sub>2</sub> have the same meaning as described above in an organic solvent such as dimethyl-formamide, dioxane or tetrahydrofuran under stirring at 27°C to 110°C, cooling the reaction mixture to room temperature if the reaction is carried out above room temperature and isolating and purifying the resulting thiopheno (4, 5-g) quinoxaline-2-carboxylate from the respective reaction mixture in a known manner, converting the thiopheno (4, 5-g) quinoxaline-2-carboxylate to carboxylic acid derivative thereof by hydrolysing the thiopheno (4, 5-g) quinoxaline-2-carboxylate with an aqueous alkali such as sodium or potassium hydroxide in the presence of an organic solvent such as dimethyl formamide, dioxane or tetrahydrofuran at room temperature, under stirring and isolating the resulting thiopheno (4, 5-g) quinoxaline-2-carboxylic acid from the respective reaction mixture in a known manner, converting the thiopheno (4, 5-g) quinoxaline-2-carboxylic acid to the quinoxaline derivative thereof by treating the thiopheno (4, 5-g) quinoxaline-2-carboxylic acid with thionyl chloride in the presence of an organic solvent such as dimethylformamide, dioxane or tetrahydrofuran at room temperature under stirring, distilling off the organic solvent and excess thionyl chloride under vacuum, treating the residue with amine of the formula HNR<sub>1</sub>R<sub>2</sub>, wherein R<sub>1</sub> and R<sub>2</sub> are as defined above in the presence of an organic solvent such as N, N-dimethylformamide under stirring and isolating and purifying the thiopheno (4, 5-g) quinoxaline of the formula I from the reaction mixture, and if desired, converting thiopheno (4, 5-g) quinoxaline of the formula I into pharmaceutically acceptable salt in a known manner.

Prov. Specn. 11 Pages.  
Compl. Specn. 13 Pages.

Drg. 2 Sheets.  
Drg. Nil.

Ind. Cl. : 29 D [XLI (2)] 206 E [LXII] 167426  
Int. Cl. : G 06 F—7/00

**AN APPARATUS FOR LOADING A CONTROL STORE MEMORY OF A CENTRAL SUBSYSTEM.**

**Applicants :** HONEYWELL BULL INC., MINNEAPOLIS, MINNESOTA 55431 UNITED STATES OF AMERICA.

**Inventors :** (1) CHESTER M. NIBBY, (2) RICHARD C. ZELLEY, (3) KENNETH E. BRUCE, (4) GEORGE J. BARLOW AND (5) JAMES W. KEELEY.

Application No. 47/Bom/1988 filed on March 1, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules 1972), Patent Office Branch, Bombay-13.

**5 Claims**

An apparatus for loading a control store memory of a central subsystem with firmware comprising; management means for generating a plurality of commands; control store means associated with the central subsystem and a memory means coupled to a system bus; address register means responsive to a first plurality of commands for initialising said address register means; said memory means, central subsystem and the register means; said memory means, central subsystem and the said management means are coupled in common to the system bus, the said memory means responsive to a second plurality of said commands for reading out said firmware and generating a first command for each of said second plurality of said commands, each of said second plurality of said commands, each of said first commands controlling a unit of said firmware, and said control store means responsive to each of said first commands for storing said unit of said firmware in a location of said control store specified by said address register means said address register means being incremented in response to each of said first commands.

Compl. Specn. 59 Pages.

Drg. 12 Sheets.



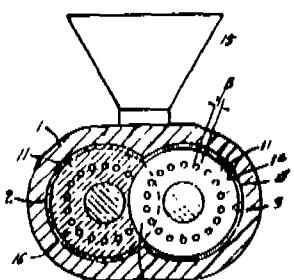


Fig. 2

Compl. Specn. 21 Pages.

Drgs. Nil.

Ind. Cl. : 168 B [LI (4), 2B<sub>2</sub> [XLI (1)] 167430  
 Int. Cl. : G 09 F—7/06

**AN IMPROVED PROCESS TO MANUFACTURE DISPLAY SYMBOLS AS INDIVIDUAL UNITS FOR INFORMATION DISPLAY SYSTEM.**

Applicant & Inventor : ANIL BHALCHANDRA PHADKE, 11, GANESHBAUG SAHAKARI GRIHARACHANA, AZADWADI, KOTHRUD, PUNE-411 029.

Application No. 169/Bom/1988 filed on 15th June, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Bombay-400 013.

**1 Claim**

Improved process to manufacture display symbols as individual units for information display system comprising making basic two components viz. (i) a flat display board with perforations or a soft medium or a board with slots and the like and (ii) individual units depicting characters, letters symbols and the like, characterized in that the said individual units having suitable anchoring means such as pins or projections provided on reverse side of the said individual units and further having on its face-characters, letter or symbols duly printed, screen-printed or embossed, the said individual units are manufactured by cutting into appropriate sized units from a pre-formed or moulded or fabricated bigger lengths in any suitable material.

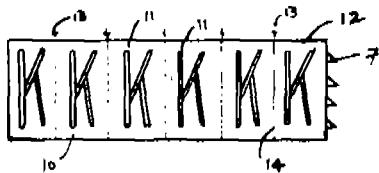


Fig. 7

Compl. Specn. 5 Pages.

Drg. 1 Sheet.

Ind. Cl. : 69 I GROUP—[LIX (1)] 167431  
 Int. Cl. : H 03 K 5/153

**AN APPARATUS FOR CONTROLLING THE INSTANT OF OPENING OF AN INTERRUPTER**

Applicant : JEUMONT-SCHNELDER, OF 31-32 QUAI DE DION BOUTON 92811 PUTEAUX CEDEX, FRANCE, A FRENCH COMPANY.

Inventor : (1) JEAN-MARIE ANDREJAK AND (2) HENRI FOCH.

Application No. 277/Mar/1986 filed on April 16, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

**2 Claims**

An apparatus for controlling the instant of opening of an interrupter comprising a first generator (1) of a logic signal (4) corresponding to the normal closing command of the said interrupter, controlling a monostable (2) emitting an impulse (B) of a determined duration in response to the level step corresponding to the cessation of the normal closing command, an OR gate (3), to the two inputs of which are applied respectively the signal (A) issuing from the said first generator (1), and the signal (B) issuing from the said monostable (2), and whose output signal is applied to a first input of a first comparator (6) while to the input of opposite sign is applied a logic signal (C) representing the actual state of the said interrupter, with the output terminal of the said first comparator (6) being connected to the input terminal of an integrator circuit (7), whose output terminal is connected to a first input terminal of a second comparator circuit (8), whose second input terminal of opposite polarity is connected to the output of a ramp generator (4) controlled by the said monostable (2) the said second comparator (8) presenting at its output terminal a logic signal representing the sign of the difference between the two signals (E, F) applied to its inputs, with this output terminal being connected to one of the inputs of an AND gate (5), whose other input is connected to the output of the said monostable (2), and whose output is connected to one input of an OR gate (9), to the other input of which is applied the signal (A) issuing from the first generator (1), and whose output signal (H) constitutes the actual logic signal corresponding to the closing command of the said interrupter.

Compl. Specn. 10 Pages.

Drg. 1 Sheet.

Ind. Cl. : 85 H [GROUP—XXXI] 167432  
 Int. Cl. : F 27 B 7/20; F 23 J 15/00

**APPARATUS FOR PRODUCING CLINKER SUCH AS CEMENT CLINKER**

Applicant : F. L. SMIDTH & CO. A/S, A DANISH COMPANY, OF 77, VIGERSLEV ALLE, DK-2500 VALBY, COPENHAGEN, DENMARK.

Inventor : TORBEN ENKEGAARD.

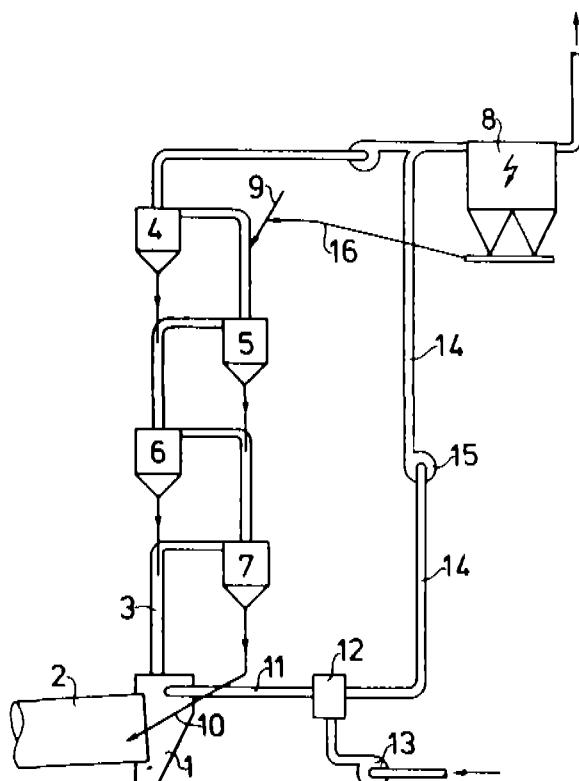
Application No. 285/Mar/1986 filed on April 17, 1986.

Convention date : June 13, 1985; (No. 5813967; United Kingdom).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

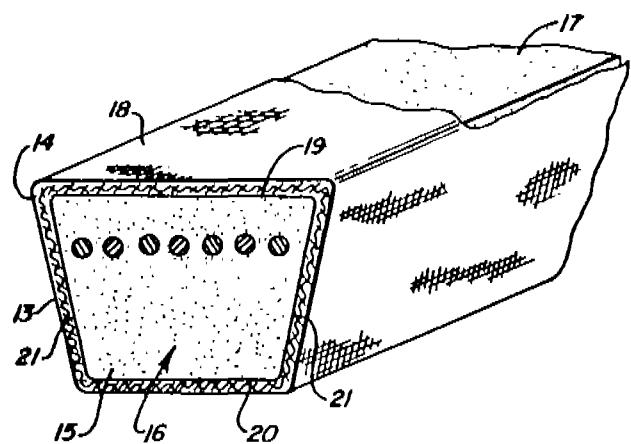
**3 Claims**

Apparatus for producing clinker such as cement clinker from raw material with a chloride content of 0.015-0.1 weight percent comprising a kiln (2), a suspension preheater (4—7) connected between an exit gas outlet of the kiln and a primary precipitator or filter (8), a by-pass conduit (11, 14) connecting the kiln exit gas outlet to the primary precipitator or filter (8) via an air quenching unit (12) and in parallel with the preheater (4—7), the by-pass conduit (14) being connected directly to the primary precipitator or filter (8).



Compl. Specn. 8 Pages.

Drg. 1 Sheet.



Compl. Specn. 13 Pages.

Drg. 1 Sheet.

Ind. Cl. : 85 G [GROUP—XXXI]

167434

Int. Cl. : C 03 B 5/02

## ELECTRICALLY HEATED MELTING FURNACE.

Applicant: CORNING GLASS WORKS, OF SULLIVAN PARK FR-212, CORNING, NEW YORK, N.Y. 14831, U.S.A., A U.S.A. COMPANY.

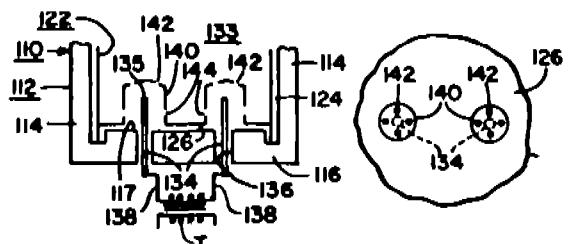
Inventor: RONALD WILLIAM PALMQUIST.

Application No. 300/Mas/1986 filed on April 21, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

14 Claims

A melting furnace (11) comprising a refractory vessel (112, 212, 912) for melting batch material and retaining a molten bath therein, a metal liner (122, 222, 922) having sidewall portions (124, 924) and a bottom plate (126, 226, 526, 626, 726, 926) positioned within said refractory vessel and spaced apart from inner surface portions thereof, electrically energizable heating means (134, 234, 434, 532, 732, 932) for supplying heat to lower portion of said melting furnace, the heating means being positioned within a space between said bottom plate and a bottom wall (116, 216, 416, 516, 616) of said refractory vessel, said heating means being spaced apart from the bottom wall of said refractory vessel, said bottom plate having at least one raised portion (140, 240, 440, 540, 640, 740, 940) in the form of a shroud to accommodate said heating means in the space formed between said plate and the bottom wall of the refractory vessel.



Ind. Cl. : 127 C [GROUP—LXV (1)] 167433  
Int. Cl. : F 16 G 5/08

## V-BELT FOR HIGH LOAD POWER TRANSMISSION.

Applicant: MITSUBOSHI BELTING LTD., A JAPANESE CORPORATION, OF NO. 1-21, 4-CHOME, HAMAZOE-DORI, NAGATA-KU, KOBE-CITY, HYOGO, PREF, JAPAN.

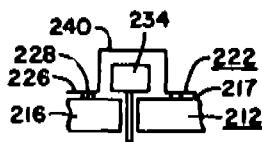
Inventor: (1) KUNIHIRO FUJITA AND (2) HIDEAKI TANAKA.

Application No. 294/Mas/1986 filed on April 18, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

12 Claims

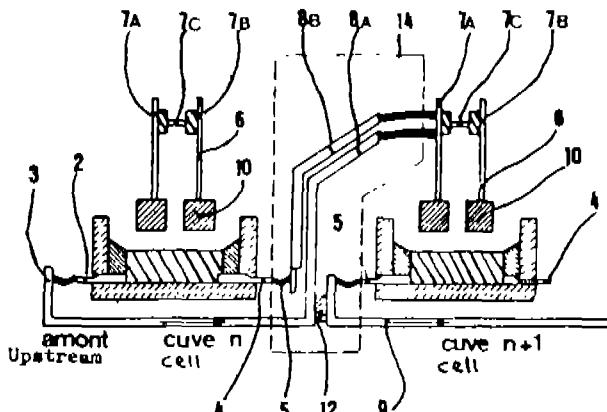
A power transmission V-belt for transmitting a high load, comprising a belt body having an inner compression section and an outer tension section and longitudinally extending tensile cords embedded in rubber between said inner and outer sections wherein at least a portion of the rubber in which said tensile cords are embedded has short reinforcing fibres distributed therein and oriented longitudinally, said fibres being present in the ratio of 0.1 to 3.0 parts to 100 parts of rubber by weight, and said rubber having a Shore A hardness of 70° to 90°.



Compl. Specn. 23 Pages.



Drgs. 3 Sheets.



Compl. Specn. 35 Pages.

Drgs. 6 Sheets.

Ind. Cl. : 70 A [GROUP-LVIII--(5)]

167435

Int. Cl. 4 : C 25 C 3/16

**A DEVICE FOR ELECTRICAL CONNECTION BETWEEN TWO SUCCESSIVE CELLS IN A SERIES INTENDED FOR THE PRODUCTION OF ALUMINIUM.**

**Applicant :** ALUMINIUM PECHINEY, OF 23 RUE BALZAC, 75008 PAIRS, FRANCE, A FRENCH COMPANY.

**Inventor :** (1) JOSEPH CHAFFY, (2) BERNARD LANGON, (3) MICHEL LEROY.

Application No. 334/Mas/1986 filed on 30th April 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras

12 Claims

A device for electrical connection between two successive cells in a series intended for the production of aluminium by electrolysis of alumina dissolved in molten cryolite by the Hall Heroult process at an intensity of 150 KA to 600 KA each cell being constituted by an insulated parallel-piped metal container of which the large axis is perpendicular to the axis of the series and of which two ends are known as "head" this container supporting a cathode formed by the juxtaposition of carbonaceous blocks having sealed metal rods, the ends of which leave the container on its two large upstream and downstream sides (relative to the direction of the current in the series), each cell also comprising an anode system formed by at least one horizontal rigid beam supporting at least one and two horizontal conducting rods known as "anode frame" on which the anode suspension shafts are attached, this connecting circuit comprising, a circuit for the transmission of electrolysis current between two successive cells constituted by cathode collectors connected on the one hand to the cathode outputs of the cell in rank n and on the other hand to the connecting conductors which join, via risers, the anode frame of the cell of rank n+1 in the series, wherein the said connecting device comprises, in addition to the circuit for the transmission of electrolysis current, a distinct circuit for the correction and balancing of the magnetic fields formed by conductors which are substantially parallel to the axis of the series, traversed by a direct current in the same direction as the electrolysis current and which creates in the cells a vertical correcting magnetic field which is directed downwards close to the lefthand heads and is directed upwards close to the righthand heads.

Ind. Cl. : 206 E [GROUP—LXII]

167436

Int. Cl. 4 : G 11 B 17/04

**A TAPE LOADING DEVICE FOR A CASSETTE TYPE TAPE RECORDING AND/OR REPRODUCING APPARATUS.**

**Applicant :** SONY CORPORATION, A CORPORATION OF JAPAN, OF 7-35 KITASHINAGAWA 6-CHOME, SHINAGAWA-KU, TOKYO, JAPAN.

**Inventors :** (1) EIJI OHSHIMA, (2) HIROMITSU BABA, (3) TAKAO KUMAGAI.

Application No. 388/Mas/1986 filed on May 20, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

7 Claims

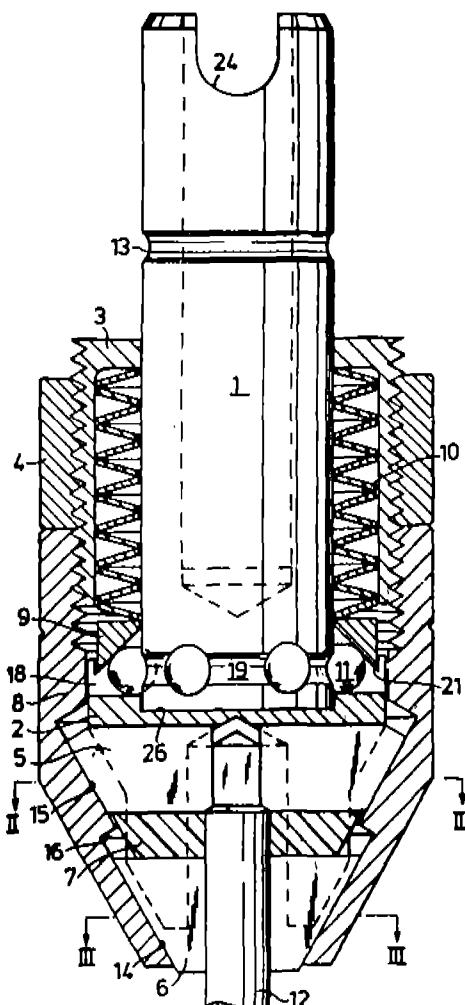
A tape loading-device for a cassette type tape recording and/or reproducing apparatus comprising a main chassis on which a rotary head drum is mounted, a sub-chassis slidably mounted on said main chassis for carrying a tape cassette, a chassis drive mechanism arranged between said main chassis and said sub-chassis so as to move said sub-chassis towards said rotary head drum, tape loading means movable from said sub-chassis to said main chassis for drawing tape out from a tape cassette and guiding said tape on the periphery of said rotary head drum, guide rail means on said sub-chassis for guiding movement of said tape loading means therealong and positioning means on said main chassis for cooperation with said guide rail means to transfer said tape loading means between said sub-chassis and main chassis and for cooperation with said guide rail means to transfer said tape loading means between said sub-chassis and main chassis and for positioning said tape loading means with respect to said rotary drum head, said positioning means including coupling means for coupling said guide rail means to said positioning means.







the drive body (1) being connected to a clamping body (8) for retention of the shaft, characterised in that the part of the clamping body (8) surrounding the shank (12) has a forward and a rear annular conical surface (14 and 15) with an intermediate abutment (16), the forward conical surface (14) being adapted for coaction with forward clamping jaws (6) for clamping against the usually circular intermediate part of the shaft, and the rear conical surface (15) being adapted to coact with rear jaws (5) for clamping against the usually square top portion of the shank, said forward, and rear jaws (6, 5) being separated by an intermediate flexible member (7).



Inventors : (1) LAWRENCE, ALVAH A. (2) NEVES W JASON.

Application No. 411/Mas/86 filed on May 27, 1986.

(Convention date : August 1, 1985) (No. 8519393; Great Britain).

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

10 Claims

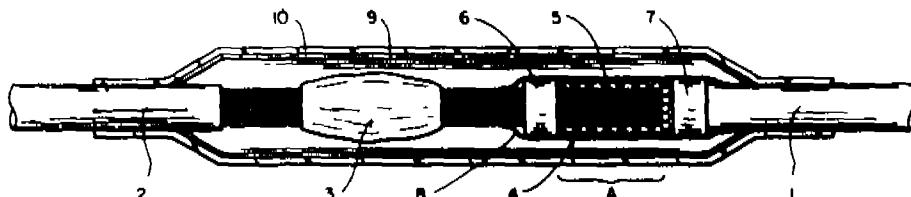
A method of making a cable assembly spliced between a cable containing paper insulation and a cable containing oil or petroleum based materials, comprises:

preparing the cables by removing the cable jackets from a portion of the conductors of the cables, splicing the conductors of the cables;

positioning a flexible reservoir around a portion of the conductors and a portion of the jacket remaining on the cable;

introducing into the reservoir a sufficient quantity of a particulate material to fill the voids between the conductors to cover the conductors and the jacket followed by closing the reservoir; and

applying means to compress the reservoir whereby the particulate material prevents the oil or petroleum based materials from migrating from the interior of the cable into the splice area.



Compl. Specn. 17 Pages.

Drg. 1 Sheet.

Ind. Cl. : 97B, 97C [GROUP—LIX(2)]  
Int. Cl. 4 : H 05 B 3/03

167446

Ind. Cl. : 61-K & 42-D [GROUP—VIII & XVI]  
Int. Cl. 4 : F 26 B 3/10

167447

APPARATUS FOR REMOVING A CASING FROM AN ELONGATE BODY

Applicant : ELKEM 9/5 A COMPANY INCORPORATED UNDER THE LAWS OF NORWAY OF MIDDLETHUNNS GATE 27, OSLO 3, NORWAY.

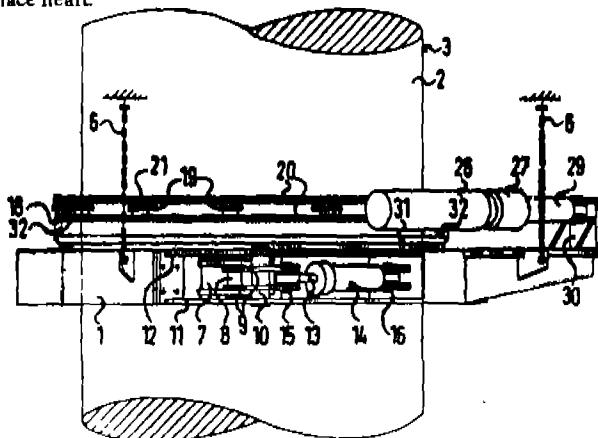
Inventors : OLAF TRYGVE VEGGE, OF SKUTEVEIN 13, 4620 VAGSBYGD, NORWAY, A NORWEGIAN SUBJECT.

Application No. 420/Mas/86 filed on May 29th, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

21 Claims

Apparatus for removing a casing from an elongate electrode while the electrode is within the furnace in which it is to be used, comprising : support means supporting first and second cutting devices adjacent the casing, the first cutting devices for cutting the casing in the longitudinal direction and the second cutting devices for cutting the casing circumferentially; and means for applying the cutting devices to the casing to separate the casing into pieces and removing the casing from the electrode before the electrode enters the furnace hearth.

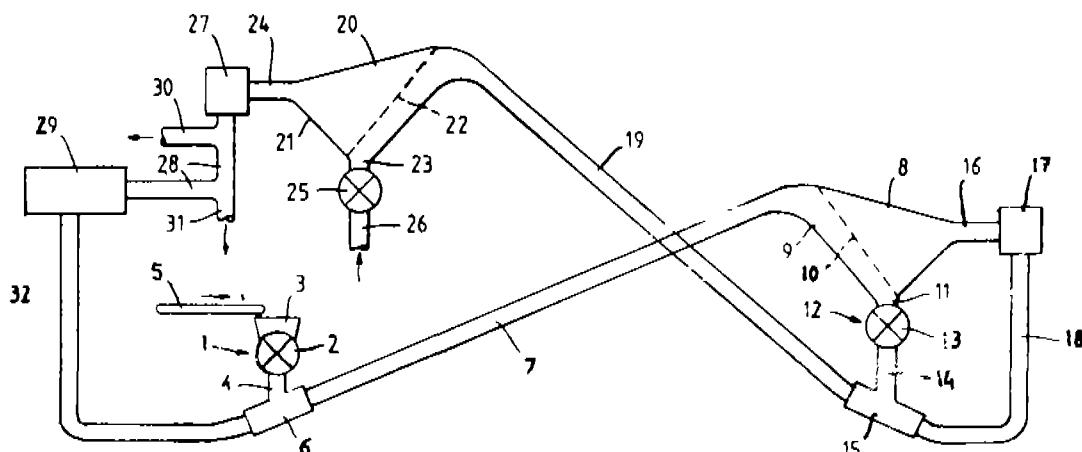


Compl. Specn. 13 Pages.

11 Claims

Tobacco drying apparatus comprising a first duct a first gas-flow passage in communication at a down-stream end thereof with an upstream end of said first duct, a first tobacco feed path extending to and opening into said first gas-flow passage, first separator means in communication with a downstream end of said first duct, a second duct, a second gas-flow passage in communication at a downstream end thereof with an upstream end of said second duct, a second tobacco feed path extending from said first separator means and opening into said second gas-flow passage, a gas-flow pipe extending from said first separator means and being in communication with the upstream end of said second gas-flow passage, and second separator means in communication with the downstream end of said second duct said first separator means having a gaseous medium and tobacco inlet a gaseous medium outlet connected to said gas-flow pipe and a tobacco outlet connected to said second feed path.

Drgs. 4 Sheets.



Compl. Specn. 18 Pages.

Drg. 1 Sheet.

Ind. Cl. : 40 B, 32 B [GROUP IV (I), IX (I)] 16/448  
 Int. Cl.<sup>4</sup> : C 07 C 5/333, B 01 J 21/00, 23/00

**METHOD FOR THE PREPARATION OF A CATALYST FOR THE DEHYDROGENATION OF C<sub>1</sub>—C<sub>5</sub> PARAFFINS**

Applicant : SNAMPROGETTI S.p.A. & NIIMSK—NAUCHNO-ISEDOVATELSKII INSTITUT MONOMEROV DLIA SINTETICHESKOGO KAUCHUKA, OF CORSO VENEZIA, 16, MILAN, ITALY & PROSPECT OKTOBRIA, 88-YAROSLAVL (USSR). A COMPANY ORGANISED UNDER THE LAWS OF THE ITALIAN REPUBLIC AND AN INSTITUTE ORGANISED UNDER THE LAWS OF THE USSR.

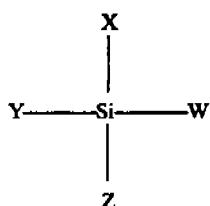
Inventor : (1) FRANCO BUONOMO, (2) RODOLFO JEZZI, (3) BRUNO NOTARI, (4) GHEORGHIY ROMANOVIC KOTELNIKOV, (5) KONSTANTINOVIC RUSLAN MICAIOV, (6) VICTOR ALEXANDROVICH PATNOV.

Application No. 453/Mas/86 filed on 12th June, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

**2 Claims**

Process for preparing a C<sub>1</sub>—C<sub>5</sub>—paraffin-dehydrogenation catalyst based on Al, Cr, K and Si, comprising the steps of : drying and calcining microspheres of aluminium oxide having a diameter from 20 to 150 Mm for at least one hour at a temperature of from 500 to 700° C; calcining said aluminium oxide microspheres once again at a temperature of at least 1000° C for at least 24 hours; impregnating said microspheres with at least an aqueous solution of Cr<sub>2</sub>O<sub>3</sub> and K<sub>2</sub>CO<sub>3</sub> together or separately; drying said impregnated microspheres, and impregnating them with a solution in an appropriate solvent of a silicon compound selected from those having the general formula :



wherein X, Y and Z are —R, —Cl, —Br, —SiH<sub>r</sub>Cl<sub>m</sub>, and R is an alkyl, a cycloalkyl, an aromatic or an alkycyclo-alkyl group, having from 1 to 30 carbon atoms, r and m is between 1 and 2, their sum being 3, and drying and calcining the silicon-compound impregnated microspheres for at least one hour at a temperature of from 550° C to 700° C.

Compl. Specn. 11 Pages.

Drg. Nil.

Ind. Cl. : 39-N—[GROUP-III] 167449  
 Int. Cl.<sup>4</sup> : C 01 D 15/00, C 01 F 7/00

**A PROCESS FOR PREPARING AN ADDUCT OF CLAY AND MIXED METAL LAYERED HYDROXIDE**

Applicant : THE DOW CHEMICAL COMPANY, A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, U.S.A., OF 2030 DOW CENTER, ABBOTT ROAD, MIDLAND, MICHIGAN-48640, UNITED STATES OF AMERICA.

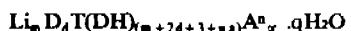
Inventors : (1) JOHN LESLIE BURBA III, (2) AUDREY LILIAN BARNES.

Application No. 509/Mas/86 filed on July 2, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

**3 Claims**

A process for preparing an adduct of clay and mixed metal layered hydroxide of the formula I



wherein

D represents divalent metal ions;  
 d is from zero to about 4;

T represents trivalent metal ions;

A represents monovalent or polyvalent anions other than OH<sup>-</sup>;

m is from zero to about 1;

(m+d) is greater than zero;

a is the number of ions of A;  
 n is the valence of A;  
 na is from zero to about -3;  
 q is from zero to about 6; and  
 $(m+2d+3+na)$  is equal to or greater than 3,

which comprises preparing by intimately mixing together an aqueous gel or dispersion of said layered hydroxide with an aqueous dispersion of clay in a ratio of 0.02/1 to 1/1 by weight whereby the metal ions from the clay and anions from the layered hydroxide go into the aqueous solution by ion exchange of clay anions for layered hydroxide anions and whereby an adduct of the mixed metal layered hydroxide and clay is formed.

Compl. Specn. 22 Pages.

No Drawing.

Ind. Cl. : 39 C [GROUP III]  
 Int. Cl.<sup>4</sup> : C 01 C 1/24

167450

**AN IMPROVED PROCESS FOR PRODUCING AMMONIUM SULPHATE**

Applicant : BASF AKTIENGESELLSCHAFT, A GERMAN JOINT STOCK COMPANY ORGANISED AND EXISTING UNDER THE LAWS OF THE FEDERAL REPUBLIC OF GERMANY, WITH A REGISTERED OFFICE AT 6700 LUDWIGSHAFEN, FEDERAL REPUBLIC OF GERMANY.

Inventor : UWE BRAND, RUEDIGER SCHMITZ, ERNST DEUKER AND HUGO FUCHS RESIDING, RESPECTIVELY, AT 12 RHEINGOLDSTRASSE, 6840 LAMPERTHEIM; 2 ROEMERSTRASSE, 6715 LAMBSHEIM; 31 WESTRING, 6718 GRUENSTADT; AND 28 EGELLSTRASSE, 6700 LUDWIGSHAFEN; FEDERAL REPUBLIC OF GERMANY; CITIZENS OF WEST GERMANY.

Application No. 736/Mas/87 filed on 14th, October, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

**3 Claims**

**A process for producing ammonium sulphate by Beckmann rearrangement of cyclohexanone oxime with sulphuric acid or oleum comprises the steps of :**

(a) mixing the reaction mixture with recycled ammonium sulfate mother liquor whose concentration is chosen so that no solid ammonium sulfate is precipitated during the neutralization,

(b) neutralizing the said mixture by feeding in gaseous ammonia at elevated temperature,

(c) separating crude lactam from the aqueous ammonium sulfate solution,

(d) evaporating the ammonium sulfate solution under reduced pressure and with separation of the crystalline ammonium sulfate from the ammonium sulfate mother liquor and

(e) recycling of the ammonium sulfate mother liquor to step (a), characterised in that the neutralization is carried out by feeding gaseous ammonia which contains water or aqueous ammonium sulphate solution in a droplet size of from 0.2 to 2.0 mm through a

plurality of nozzle orifices into the solution of the reaction mixture in the ammonia sulphate mother liquor, at a temperature in the range of 80° to 115°C till the pH is in the range of 3 to 6.

Compl. Specn. 11 Pages.

Drg. Nil.

Ind. Cl. : 126 B [GROUP LVIII(6)]  
 Int. Cl.<sup>4</sup> : G 01 V 3/08

167451

**AN APPARATUS FOR CARRYING OUT AN ELECTROMAGNETIC GEOPHYSICAL SURVEY**

Applicant : BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYSTEM, AN INSTITUTION DULY ESTABLISHED ACCORDING TO THE CONSTITUTION OF THE STATE OF TEXAS, HAVING A PRINCIPAL PLACE OF BUSINESS AT 201 WEST 7TH STREET, AUSTIN, TEXAS 78701, UNITED STATES OF AMERICA.

Inventor : FRANCIS XAVIER BOSTICK, JR., A CITIZEN OF THE UNITED STATES OF AMERICA, RESIDING AT 4700 CAT MOUNTAIN DRIVE, AUSTIN, TEXAS 78731, UNITED STATES OF AMERICA.

Application No. 374/Mas/86 filed on 14th May, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

**9 Claims**

**A system for an electromagnetic geophysical survey, comprising :**

**means for measuring the variations in the earth's magnetic field in at least two horizontal nonparallel directions;**

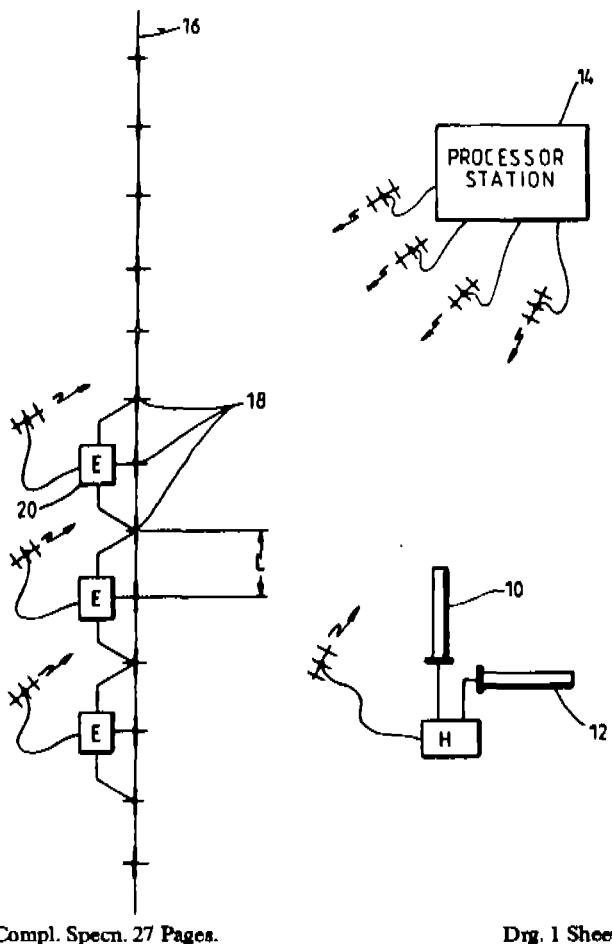
**means for measuring simultaneously the variations in the earth's electric field parallel to and orthogonal to a survey line at plurality of points at pre-determined spacing for sampling spatial variations of the earth's electric field along the said survey line;**

**means for transforming the measured variations in the magnetic field and electrical field into frequency components;**

**means for computing the horizontal component of the earth's magnetic field orthogonal to the direction of the measured electric field at each of the survey points from the measurements of the magnetic field in the two non-parallel directions as a function of frequency;**

**means for computing the impedance at each survey point, the impedance being the ratio between the measured electric field at that point and the horizontal component of the earth's magnetic field orthogonal to the direction of the measured electrical field as a function of frequency; and**

**means for computing the weighted averages of the said impedances.**



Compl. Specn. 27 Pages.

Drg. 1 Sheet.

Ind. Cl. : 98-I—[GROUP-VII (2)]  
Int. Cl.<sup>4</sup> : F 24 J 2/16

167452

# A SOLAR ENERGY LINEAR CONCENTRATOR AND A METHOD OF MANUFACTURING THE SAME

Applicant & Inventor: BENNE NARASIMHAMURTHY SRIDHARA, 123 6TH CROSS RAJMAHAL VILAS EXTENSION, BANGALORE-560 080, KARNATAKA, INDIA, INDIAN NATIONAL.

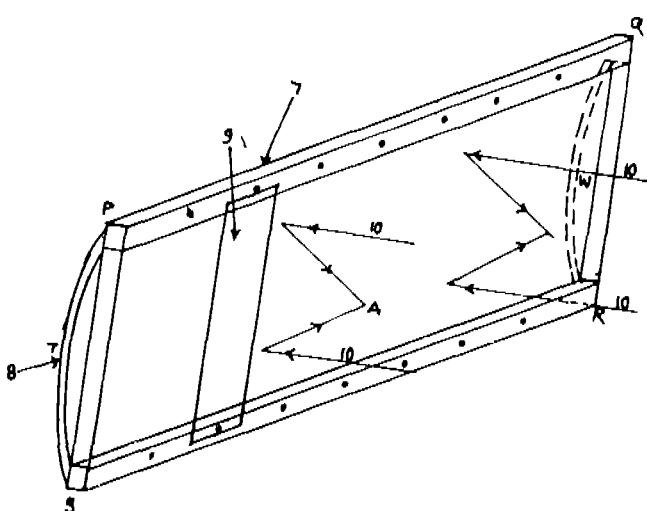
Application and Provisional Specification No. 390/Mas/86 filed on May 21, 1986.

Complete Specification left August 21, 1987.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

### 3 Claims

A method of manufacture of a solar energy linear concentrator comprising the steps of fixing a flexible or resilient solar reflective sheet having the shape of a rectangle square or other parallelogram to a frame of a corresponding shape, the width of the frame being less than the width of the sheet, whereby after the sheet along one of its length sides is fixed to one of the length-sides of the frame, the other length-side of the sheet is pressed into alignment with the other length-side of the frame and fixed thereto, thus providing a curvature along the length of the sheet.



Prop. 5 Pages, Compl. 6 Pages.

Dry. I Sheet.

Ind. Cl. : 98-I—[GROUP-VII(2)]  
Int. Cl.<sup>4</sup> : F 24 J 2/16

167453

A SOLAR ENERGY LINEAR CONCENTRATOR AND A  
METHOD OF MANUFACTURING THE SAME.

Applicant & Inventor : BENNE NARASIMHAMURTHY SRIDHARA, 123, 6TH CROSS RAJMAHAL VILAS EXTENSION, BANGALORE-560 080, KARNATAKA, INDIA, INDIAN NATIONAL.

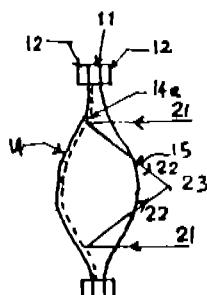
Application and Provisional Specification No. 391/Mar/86 filed on 21st May, 1986.

Complete Specification left 21st August, 1987.

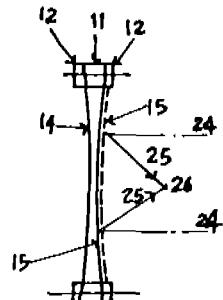
**Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.**

**10 Claims**

A solar energy linear concentrator comprising two flexible transparent sheets held in spaced relationship, by clamping means, with the space between the sheets out of contact with atmosphere: a fluid control valve, opening into the space, for evacuating the space of air or for pumping fluid thereinto by extraneous means, and thus for rendering the configuration of the sheets concave or convex solar deflecting surfaces.



Prov. 6 Pages.  
Compl. Specn. 9 Pages.



Drg. NIL.  
Drg. 1 Sheet.

Ind. Cl. : 15-D & 9-F—[GROUP-LIV(I) & XXXIX(I)] 167454  
Int. Cl. 4 : C 22 C 21/10 & F 16 C 33/12

**A PROCESS FOR THE PRODUCTION OF AN ALUMINIUM-BASED BEARING ALLOY.**

**Applicant :** AE PLC, OF CAWSTON HOUSE, CAWSTON, RUGBY, WARWICKSHIRE CV22 7SB, ENGLAND, A BRITISH COMPANY.

**Inventor :** BARRY JOHN EASTWOOD

**Application No.** 398/Mas/86 filed on May 22, 1986.

**Convention date :** May 28, 1985; (No. 8513330; Great Britain).

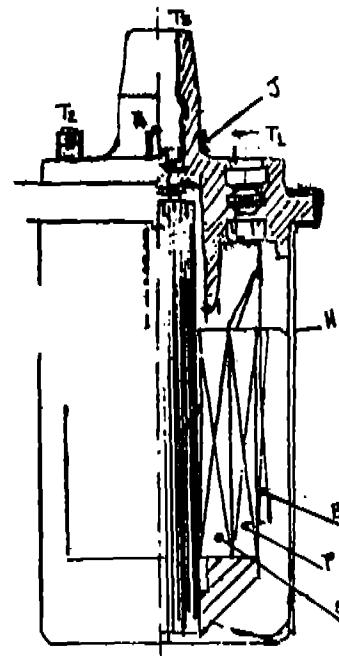
**Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.**

**9 Claims**

A process for the production of an aluminium-based bearing alloy having a steel backing comprising the steps of preparing an alloy having in weight percent; 8 to 35 tin, 1 to 3 copper, 2 to 10 silicon and remainder aluminium part from incidental impurities bonding the alloy to steel in a known manner, raising the temperature of the bonded material to a temperature having a range of 400°C to 525°C for 60 seconds to 240 minutes and subsequently cooling the bonded material to ambient temperature wherein at least till 200°C it is cooled at a minimum cooling rate of 50°C per minute.

Compl. Specn. 22 Pages.

No Drawing.



Compl. Specn. 7 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 119 F 4 [GROUP XXI (3)] 167456  
Int. Cl. 4 : D 03 D 47/14.

**DEVICE FOR GUIDING THE WEFT-CARRYING GRIPPERS AND THEIR CONTROL STRAPS THROUGH THE SHED OF GRIPPER LOOMS.**

**Applicant :** VAMATEX S.P.A., OF VIA GLERA, 18 24020, VILLA DI SERIO (BG), ITALY, AN ITALIAN COMPANY.

**Inventor :** LUIGI PEZZOLI, OF VIA S. MICHELE-24026, LEFFE (BERGAMO) ITALY, AN ITALIAN CITIZEN.

**Application No.** 433/Mas/86 filed on 3rd June, 1986.

**Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.**

**5 Claims**

Device for guiding the weft-carrying grippers and their control straps through the shed of gripper looms, characterized in that they comprise a plurality of guide elements (3) aligned on the sley (1), each element (3) being provided with at least two distinct seats (4, 5) for housing respectively a strap (6) and a gripper (8) having extensions or tongues (7, 11, 15, 18, 22), the seat (5) housing the gripper (8) capable of preventing any lateral or upward movements of said gripper (8).



Compl. Specn. 8 Pages.

Drgs. 2 Sheets.

Ind. Cl. : 65 B 2 [GROUP LVII (2)] 167455  
Int. Cl. 4 : H 01 F 5/08

**A BALLASTED IGNITION COIL FOR USE IN AUTOMOBILES.**

**Applicant :** LUCAS-TVS LIMITED, PADI, MADRAS-600 050, TAMIL NADU, INDIA, A COMPANY DULY ORGANISED AND EXISTING UNDER THE LAWS OF THE UNION OF INDIA.

**Inventors :** (1) MAYUR ANANTHACHARI SRINIVASAN, CHIEF ENGINEER-NEW PRODUCTS, (2) R. UMASHANKAR, DEVELOPMENT ENGINEER, (3) MANGALORE SANTOSH HEGDE, GRADUATE TRAINEE, ALL OF LUCAS-TVS LIMITED, PADI MADRAS-600 050, TAMIL NADU, INDIA, ALL INDIAN NATIONALS.

**Application No.** 401/Mas/86 filed on 26th May, 1986.

**Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.**

**5 Claims**

A ballasted ignition coil for use in automobiles comprising a primary winding wound over a secondary winding, characterized by a ballast winding wound over the primary winding and connected in series therewith, the turns of the ballast winding being equally and oppositely disposed to render them magnetically neutral.

Ind. Cl. : 27 C, 27 I [GROUP XXVI (1)]  
Int. Cl.<sup>4</sup> : E 04 B 5/55.

167457

Ind. Cl. : 28 B, F [GROUP XXX (1)]  
Int. Cl.<sup>4</sup> : F 23 D 17/00.

167458

**A FRAME FOR UPGRADING THE DURABILITY OF CONCRETE STRUCTURES.**

Applicant : SHIMIZU KENSETSU KABUSHIKI KAISHA, A JAPANESE JOINT STOCK COMPANY, OF 16-1 KYOBASHI 2-CHOME CHUO-KU, TOKYO, JAPAN.

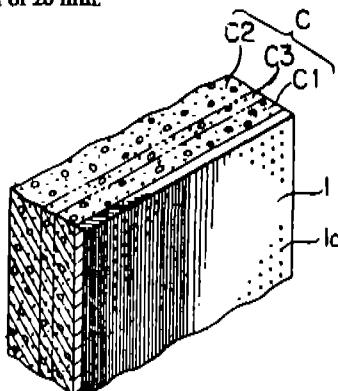
Inventor : HIROO TAKATA, C/O SHIMIZU KENSETSU KABUSHIKI KAISHA, OF 16-1 KYOBASHI 2-CHOME, CHUO-KU, TOKYO, JAPAN.

Application No. 447/Mas/86 filed on 11th June, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

**8 Claims**

A frame for upgrading the durability of concrete structures comprising a sheet-like material having many small holes for dehydration formed on its entire surface and a retaining board positioned outside the sheeting, provided with water passages to let water pass from the sheeting and for retaining the sheeting, the said holes having a maximum dimension of 20 mm.



Compl. Specn. 19 Pages.

Drgs. 5 Sheets.

**AN IMPROVED DUAL BURNER.**

Applicant : BBC BROWN BOVERI LTD., CH-5401, BADEN, SWITZERLAND, A SWISS COMPANY.

Inventors : (1) JEAN HELLAT, OF MOOSSTR. 9, 5406 RUTIHF, BADEN SWITZERLAND, A CITIZEN OF GERMANY. (2) JAKOB KELLER, OF PLATTENSTR. 8, 5604 DOTTIKON, SWITZERLAND, A CITIZEN OF SWITZERLAND.

Application No. 587/Mas/86 filed on 22nd July, 1986.

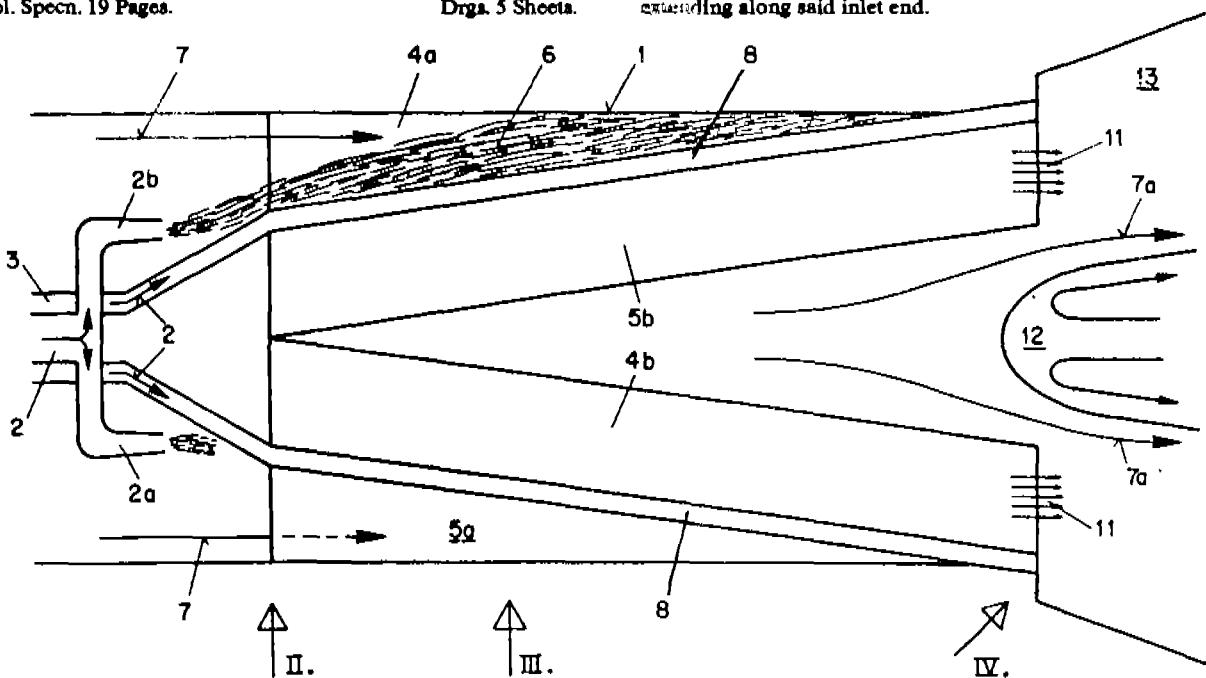
Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

**6 Claims**

An improved dual burner for generating hot gas of the type having supply systems for air and gaseous liquid fuel, and a swirler assembly, the improvement comprising :

a swirler assembly having an inlet end and an outlet end, and at least two doubly curved sheets folded along diagonal lines extending conically outward toward said outlet end, each of said doubly curved sheets having first and second curved fold faces, said first fold face forming an internal core which expands in the direction of said outlet end, and said second curved fold face forming an external core which contracts in the direction of said outlet end, said first curved fold having an edge extending in the direction of said outlet end,

fuel mains extending along said first curved fold face edges, said fuel mains being provided with fuel nozzles, and a tangential air inlet extending along said inlet end.



Compl. Specn. 11 Pages.

Drgs. 5 Sheets.

Ind. Cl. : 107 G, J [GROUP XLVI (2)]  
Int. Cl. 4 : F 02 N 11/00, 17/00

167459

STARTER DEVICE FOR INTERNAL COMBUSTION ENGINES FOR MOTOR VEHICLES.

Applicant : MAGNETI MARELLI S.P.A., AN ITALIAN JOINT STOCK COMPANY OF PIAZZA S. AMBROGIO 6, MILANO, ITALY.

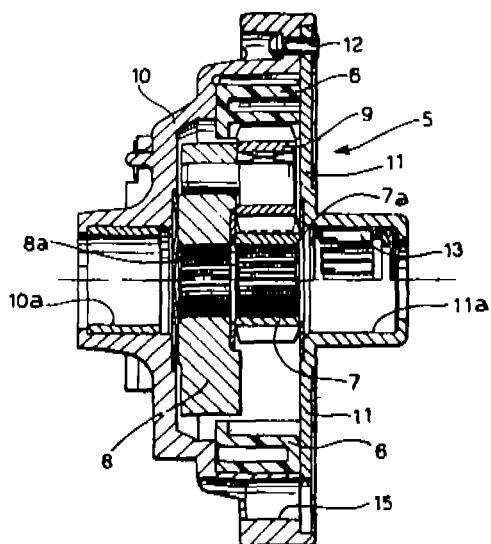
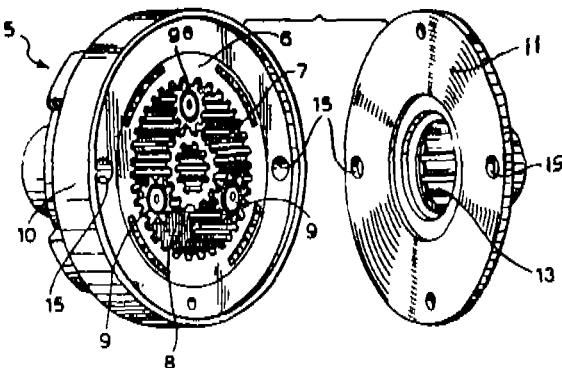
Inventor : TERESIO DONGHI, OF VIA DE GASPERI 4, TRIUGGIO, MILANO, ITALY, OF ITALIAN NATIONALITY.

Application No. 1007/Mas/86 filed on 23rd December, 1986.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office, Madras Branch.

3 Claims

Starter device for an internal combustion engine for motor vehicles, comprising a support casing (1; 1a; 1b) in which are mounted a drive shaft (4) carrying a pinion (6) adapted to engage corresponding teeth of a rotatable member (7) of the internal combustion engine, and an electric motor (2) the shaft (2a) whereof is coupled to the drive shaft (4) through a reduction unit (5) in particular an epicyclic reduction unit, the reduction unit (5) is preassembled in a housing (10, 11) having a first inlet aperture (10a) for insertion of one end of the drive shaft (4) and a second inlet aperture (11a) for the insertion of one end of the shaft (2a) of the electric motor (2).



Draw. 2 Sheets.

Compl. Specn. 8 Pages.

Ind. Cl. : 69 B [GROUP LIX (1)]

167460

Int. Cl. 4 : H 01 H 83/00

DOMESTIC ELECTRIC SHOCK PROTECTOR.

Applicant : INDIAN SPACE RESEARCH ORGANISATION DEPARTMENT OF SPACE, F BLOCK, CAUVERY BHAVAN, DISTRICT OFFICE ROAD, BANGALORE 560009, INDIA.

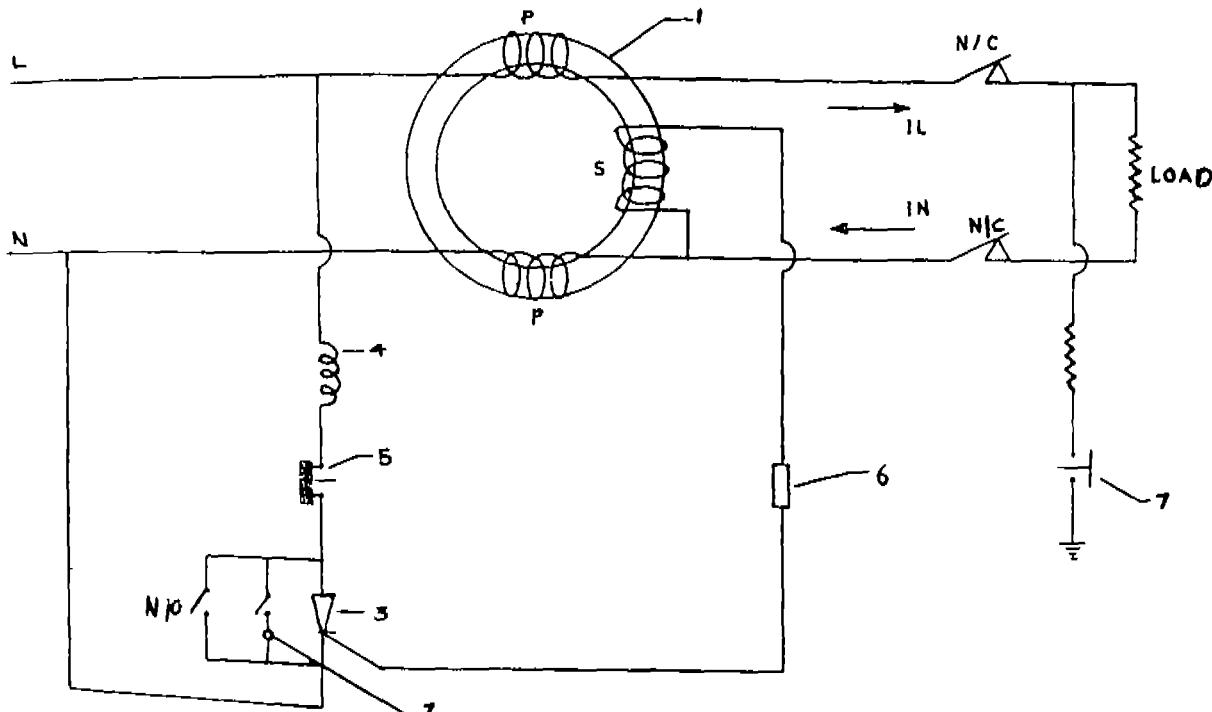
Inventor : K. RAMAKRISHNARAO OF STEXSHAR CENTRE SRIHARIKOTA 524 124, NELLORE DISTRICT, A.P.

Application No. 103/Mas/88 filed on 18th February, 1988.

Appropriate Office for Opposition Proceedings (Rule 4, Patents Rules, 1972), Patent Office Branch, Madras.

9 Claims

Domestic electric shock protector comprising a toroidal balanced current transformer having live and neutral wires wound in opposite directions with equal number of turns to form the primary, the secondary is wound on the same core the output of which is fed to the gate of an SCR, the cathode of the SCR is connected to the neutral wire, the anode of the SCR is connected to the live wire through an electromagnetic relay having two change over contacts for tripping the power supply to the load.



## REGISTRATION OF DESIGNS

The following design have been registered. They are not open to inspection for a period of two years from the date of registration except as provided for in Section 50 of the Designs Act, 1911.

The date shown in the each entries are the date of registration in the entry.

**Class 1.** No. 162194. Wasmake Industries, Indian Proprietary Firm of 40 Strand Road, 3rd floor, Room No. 18/6, Calcutta-700001, West Bengal, India. "Extruded Metal Channel". June 12, 1990.

**Class 3.** No. 161941. De Beers Industrial Diamond Division (Proprietary) Limited, A South African Company of 45 Main Street, Johannesburg, Transvaal, South Africa. "Gemstone Polishing Table". March 15, 1990.

**Class 3.** No. 162200. Phenoweld Polymer Pvt. Ltd., Saki Vihar Lake Road, Bombay 400072, Maharashtra, India, Indian Company. "Wall Rack for Toilets". June 13, 1990.

**Class 3.** No. 162201. Phenoweld Polymer Pvt. Ltd., Saki Vihar Lake Road, Bombay 400072, Maharashtra, India, Indian Company. "Wall Rack for Toilets". June 13, 1990.

*Copyright extended for the second period of five years.*

No. 156134 **Class 1.**  
Nos. 156110, 156133, 156138, 158438, 156495, 160216, 160295, 156498, 157222, 157278, 160615 & 161174 **Class 3.**

*Copyright extended for the third period of five years.*

Nos. 156110, 156133, 156138, 158438, 156495, 160216, 160295, 156498, 157222, 157278, 160615 & 161174 **Class 3.**

**R.A. ACHARYA**  
Controller General of Patents,  
Designs and Trade Marks.

